

Citrix XenServer 6.0 Administration – Exam A26

The Citrix XenServer 6.0 Administration exam is divided into the following sections:

- Installing and Implementing XenServer
- Managing and Maintaining Hosts
- Managing and Maintaining Virtual Machines and Templates
- Configuring and managing resource pools
- Installing and configuring Provisioning Services
- Maintaining Provisioning Services
- Configuring Advanced Features
- Backing up and Restoring
- Troubleshooting

Preparatory Recommendations for the Exam

Citrix Education recommends that prior to taking this exam, candidates have the knowledge, skills and abilities required to install, administer, and support a XenServer 6.0 enterprise environment which includes Provisioning Services. This exam does not include content about features included in Citrix XenServer Platinum edition.

Recommended Knowledge and Skills

- Experience implementing, interfacing with, or managing storage infrastructures
- Experience configuring network settings, including multiple NIC bonds for dedicated traffic
- Knowledge of networking fundamentals including DNS, TCP/IP, VLAN and sub-netting
- Experience managing and monitoring enterprise servers
- Knowledge of enterprise server and client operating systems
- Knowledge of basic Linux-based xe commands
- In-depth knowledge of registry settings and ability to manipulate them
- Experience with Application Packaging for an enterprise environment with a large number of servers
- Knowledge of Storage Area Networks (SAN) storage solutions, including storage interfaces, such as Fibre Channel over Ethernet and iSCSI
- 3+ years of experience with Microsoft Windows 200X (expert level)
- Knowledge of Microsoft Active Directory

Recommended Product Expertise

We recommend that candidates have approximately six months of experience with the following tasks in a XenServer 6.0 environment:

- Configuring XenServer 6.0 Enterprise Edition
- Creating Virtual Machines
- Working with Virtual Machines
- Managing and Maintaining XenServer Hosts
- Creating and Managing Storage
- Working with Pools
- Using the XenServer Command-Line Interface
- Implementing High Availability and Virtual Machine Recovery
- Working with work load balancing
- Configuring Provisioning Services
- Working with vDisks in Provisioning Services
- Working with XenConvert in Provisioning Services
- Working with Sites and device collections in Provisioning Services

Recommended Citrix Courses

Citrix Education recommends that candidates get hands-on experience with XenServer 6.0 and Provisioning Services prior to taking this exam. One of the best ways to do this is by taking formal Citrix training courses. The following courses provide basic training on administrative tasks.

- CXS-203-1I Citrix XenServer 6.0 Administration(Instructor-led training course or self-study)
- CXS-203-1W Citrix XenServer 6.0 Administration (Self-paced online training course)

It is recommended that candidates get experience setting up a XenServer 6.0 environment with Provisioning Services running on the virtual machines. While this hands-on experience can be done on the job, Citrix Education's official courses offer a safe and robust environment in which to learn these tasks. Thus, they are one of the best ways to prepare for the exam.

Exam Objectives

Implementing XenServer

- Given a scenario, establish how to configure options on the XenServer host so that it starts up from SAN.
- Given a scenario, determine how to configure a NIC for the management interface.
- Define how to configure/reconfigure DHCP OR hostname, IP, mask, Gateway and DNS based on a list of requirements for an environment.
- Given NTP server and time zone details, resolve how to configure/reconfigure NTP and time/time zone after the installation of XenServer.

Managing and Maintaining Hosts

- Define which actions an administrator must take to apply updates (upgrades/patches) to XenServer Hosts.
- Given a scenario, identify how to shut down the XenServer Host without any loss of performance.
- Given a description of a situation, determine which actions an administrator must take to recover the host when high availability is enabled.
- Given a description or set of requirements, establish how to set email alerts at the pool-level as well as alerts at the host or virtual machine level.
- Given a scenario, define how to integrate XenServer into Active Directory.
- Given a description of an environment, define how to configure XenServer Role-based Access Control.

Managing and Maintaining Virtual Machines and Templates

- Given a scenario in which a virtual machine must be copied using a particular method, select the necessary steps to copy the virtual machine.
- Given a scenario, identify how an administrator can use the import/export feature of XenServer.
- Determine the correct steps to take to create a virtual machine using the XenConvert Physical to Virtual (P2V) conversion or the XenConvert Virtual to Virtual (V2V) conversion of an existing server, based on a list of requirements.
- Control a virtual machine, including suspending, graceful, or forced shutdown and graceful or forced restart of a virtual machine.

Configuring and Managing Resource Pools

- Given a scenario, determine which actions an administrator must take to add or remove a host to or from a resource pool using the CLI or GUI.
- Given a scenario, decide how to complete pool master maintenance with high availability enabled.
- Given a scenario, either with high availability enabled or disabled, select the steps needed to change the pool master.
- Based on a description of an environment, select the steps to create a storage repository.
- Given a description of an environment, define how to configure storage repository for Intellicache.
- Given a scenario, determine how to configure DMP and MPP multipathing.
- Based on the needs of an environment, determine how to create a network and assign a vLAN to that network.
- Based on the needs of an environment, determine how to create a cross-server private network.
- Based on a scenario, decide how to create a bond and configure the management interface in the bond.
- Based on the needs of an environment, decide when to segregate XenServer host management traffic from other management traffic, such as storage management, using separate physical switches or using separate VLANs.
- Given a scenario, determine when to utilize the rolling upgrade wizard.

Installing and Configuring Provisioning Service

- Decide which PXE service options to select when installing Provisioning Services.
- Decide how to configure TFTP and bootstrap options for a given environment.
- Identify how to configure the generic Stream server startup list for a given environment.
- Determine how to create a bootstrap disk when configuring virtual machine startup options.
- Determine how to configure DHCP options 66 and 67 when configuring VM boot options.
- Decide how to configure PXE when configuring VM boot options.

Maintaining Provisioning Services

- Determine how to create or delete a machine account in Active Directory on the Provisioning Services server in a XenServer environment.
- Determine how to change the properties of the target device vDisk based on stated requirements.
- Determine which vDisk properties to change and which cache mode to use for a vDisk based on

given requirements.

- Define how to update a vDisk based on a description of an environment and the needs of that environment.
- Decide when the vDisk image mode needs to be changed in a described environment.
- Conclude when to create an additional site(s), store(s), or device collection(s) based on a given scenario.
- Determine how to create a template based on a list of requirements.
- Decide how to configure and enable an offline database to back up the PVS database, based on a list of requirements.

Configuring Advanced Features

- Determine when StorageLink is beneficial to a given environment based on a description of the environment.
- Conclude when integrated disaster recovery is beneficial to a given environment based on a description of the environment.
- Decide how to correctly set up access control list (ACL) policies on the vSwitch, based on a list of requirements.
- Determine when to correctly set up quality of service (QoS) policies on the vSwitch, based on a list of requirements.
- Decide when to enable and configure high availability based on the needs of a described environment.
- Define how to configure a virtual appliance to work with high availability, based on a description of an environment.
- Determine if a virtual machine can use dynamic memory control, given a description of the virtual machine and the environment it is in.
- Decide how dynamic memory control needs to be configured to meet the needs of a described environment.

Backing Up and Restoring

- Decide how to configure a backup schedule for storage repository metadata, based on a given scenario.
- Select the steps to take to backup a pool given a description of an environment.
- Conclude when an offline backup of a virtual machine should be performed based on a given scenario.
- Conclude when an online backup of a virtual machine should be performed based on a given scenario.
- Determine how to restore a virtual machine based on a description or list of requirements.

Troubleshooting

- Given a description of a networking issue, determine how to resolve the issue.
- Given a description of a storage issue, find out how to resolve the issue.
- Given a description of an issue with the XenServer Host, find out the root cause.
- Given a description of an issue with a virtual machine, identify a method to resolve the issue.
- Given a Provisioning Services issue, resolve the root cause of the issue.